

Musical Habitats

1 EXTENSION



Section 3 WILDLIFE ACTIVITIES

Grade Level: K-4

State Standards: S A-14

Subjects: Art, science

Skills: Analysis, drawing conclusions, projection

Group Size: 1-4, whole class

Setting: Indoor

Vocabulary: Endangered, EndangeredSpeciesList, habitat, migrate, nest, shelter, territory, threatened

Objective:

Students will demonstrate how habitat loss affects wildlife populations.

Teaching Strategy:

Students create habitat for one pair of bald eagles and simulate the effects of habitat loss on populations.

Complementary Activities:

“Distant Thunder” in this section. “Habitat Grid” and “Habitat Boxes” in Section 1. “Population Posters” in Section 2. “Can Do!” in Section 4.

Materials:

Recorded music, paper or cardboard, crayons or marking pens, scissors, glue, colored construction paper.

OPTIONAL: To illustrate the story for young students, pictures of eagles, their nest tree, nest, and salmon.

Background:

See INSIGHTS Section 3, When Populations Decline – Losing Biodiversity: “Bald Eagle” Fact Sheet.

Procedure:

1. Explain that during the time a pair of eagles is raising their young, they live in an area called a nesting **territory** where they can find all their **habitat** needs – *food, water, shelter, and space in a suitable arrangement*.

2. Each nesting territory can only support one pair of eagles and their young. When the young eagles get bigger and are able to fly, they fly away and find their own territory. The adult eagles will often **migrate** somewhere else during winter; but next summer they will return to the same nesting territory to nest again.

3. Read and write on the board (or use pictures) the following description of bald eagle habitat requirements:

“Bald eagles eat fish, especially salmon. Bald eagles live near a lake or the ocean where they find their food. Bald eagles build their nests in large, old trees with large tops. They also perch in tall, old trees to look for fish in the water.”



4. Tell students they will be using art supplies to make a territory that will meet all the habitat needs of a pair of bald eagles (you may want to write “*food, water, shelter, and space*” on the board as a reminder). They can draw or cut the construction paper and glue it onto the paper or cardboard.

5. Distribute art supplies. Each student will make a habitat for one pair of bald eagles. After the students complete their territories, have them share what they did in small groups.

6. Ask the class if they can think of ways bald eagle habitat could be changed or lost (*not enough salmon return, not enough large, old trees for nesting, polluted lakes and oceans, for example*). Explain that if the eagles cannot meet all of their habitat needs, they can no longer live in that territory. Tell them they will be playing a game to find out what happens to an eagle population when habitat is lost.

7. Tell each student to place his or her habitat under a desk or a chair.

8. Students will be a pair of bald eagles. They must find a place to live. Remind them that each habitat is enough for only one pair of bald eagles. The student must sit in the chair above the habitat when the music stops.

9. Play rounds of “musical chairs,” removing one or more territories from beneath the chairs or desks each round. Let the students know what is happening to the habitat. *For example, say “a nesting tree was cut down, one habitat is destroyed” or “a lake was polluted, habitat for two eagles was destroyed” as you remove the habitat*. Do this in such a way that the students need to move farther to get to the remaining territories.

10. If a student sits in a chair or desk with no territory, that student is out of the game and can help you remove habitat. Continue the game until only one territory remains.

11. Ask the following questions:

- What would happen to eagles that cannot find a territory with all of their habitat needs? (*They would have to find a territory somewhere else or die.*)

- What happened to the population of eagles as habitat was removed? (*It got smaller.*)
- What would happen to eagles if the last eagle died? (*They would be **extinct**.*)

Evaluation:

Students choose an animal other than an eagle and create a similar game, including ways their animals’ habitat could be lost or restored.

EXTENSIONS:

Add “endangered” status to the game. Define the term **endangered** – *in danger of becoming extinct*. Play the game again and ask the students to decide when the eagle population should be considered **threatened** and when it should be considered endangered. (*There is no set population size that triggers the listing so the students can discuss what they consider a small population.*) When is the population extinct? (*When the population drops to zero.*)

After the students choose a population level that will trigger an endangered label, play the game a third time. When the population reaches the low level set by the students and becomes endangered, have the students who are no longer living eagles help repair the habitat to stabilize the population. Students could also make rules about what people should not be allowed to do that would affect the eagles’ habitat.

Curriculum Connections:

(See appendix for full citations)

Books:

The Bald Eagle Returns (Patent)

Eagles for Kids (Gieck)

Soaring with the Wind, the Bald Eagle (Gibbons)

Three River Junction: A Story of an Alaskan Bald Eagle Preserve (Burnham)

Media:

Eagles (Video)

Teacher Resources:

(See appendix)

